

U.S. DEPARTMENT OF LABOR
Occupational Safety and Health Administration

MATERIAL SAFETY DATA SHEET

Form Approved
OMB No. 44-R1383

Follow-up

OPM 1453
ALODINE
1200

SECTION I

MANUFACTURER'S NAME ENTHONE, INC.		EMERGENCY TELEPHONE NO. 203 - 934-8611
ADDRESS (Number, Street, City, State, and ZIP Code) Box 1900, New Haven, Ct. 06508		
CHEMICAL NAME AND SYNONYMS N/A	TRADE NAME AND SYNONYMS Enthox AL 990	
CHEMICAL FAMILY N/A	FORMULA N/A	

SECTION II - HAZARDOUS INGREDIENTS

PAINTS, PRESERVATIVES, & SOLVENTS	%	TLV (Units)	ALLOYS AND METALLIC COATINGS	%	TLV (Units)
PIGMENTS			BASE METAL		
CATALYST			ALLOYS		
VEHICLE			METALLIC COATINGS		
SOLVENTS			FILLER METAL PLUS COATING OR CORE FLUX		
ADDITIVES			OTHERS		
OTHERS					

HAZARDOUS MIXTURES OF OTHER LIQUIDS, SOLIDS, OR GASES	%	TLV (Units)
Chromic Acid	10	0.1 mg/M ³
Nitric Acid	< 5	5.0 mg/M ³
Fluoride (as F ⁻)	< 5	2.5 mg/M ³
Molybdenum (as Mo)	< 5	5.0 mg/M ³

SECTION III - PHYSICAL DATA

BOILING POINT (°F.)	216°F.	SPECIFIC GRAVITY (H ₂ O=1)	1.11
VAPOR PRESSURE (mm Hg.)	-	PERCENT, VOLATILE BY VOLUME (%)	
VAPOR DENSITY (AIR=1)	-	EVAPORATION RATE (_____ =1)	
SOLUBILITY IN WATER	very soluble		
APPEARANCE AND ODOR			

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

FLASH POINT (Method used)	None	FLAMMABLE LIMITS	--	Lel	Uel
EXTINGUISHING MEDIA in a fire - Water, CO₂, Foam					
SPECIAL FIRE FIGHTING PROCEDURES --					
UNUSUAL FIRE AND EXPLOSION HAZARDS Violent reaction with strong reducers					

SECTION V - HEALTH HAZARD DATA	
THRESHOLD LIMIT VALUE	N/A
EFFECTS OF OVEREXPOSURE	Irritation of skin, mucous membranes, eyes, nose, throat. Irritation may be severe.
EMERGENCY AND FIRST AID PROCEDURES	
External - Wash with much water; report to doctor.	
Internal - Induce vomiting, drink much water; report to doctor.	

SECTION VI - REACTIVITY DATA			
STABILITY	UNSTABLE		CONDITIONS TO AVOID
	STABLE shelf life	1 yr.	
INCOMPATIBILITY (Materials to avoid) Reducers, alkalis, organic matter, cyanide.			
HAZARDOUS DECOMPOSITION PRODUCTS in a fire - Toxic nitrogen, sulfur and trivalent chromium compounds.			
HAZARDOUS POLYMERIZATION	MAY OCCUR		CONDITIONS TO AVOID
	WILL NOT OCCUR	X	

SECTION VII - SPILL OR LEAK PROCEDURES	
STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED	
Flush away with water.	
WASTE DISPOSAL METHOD	
Reduction of hexavalent chromium, then precipitation of Cr ⁺³ , fluoride, molybdenum	

SECTION VIII - SPECIAL PROTECTION INFORMATION			
RESPIRATORY PROTECTION (Specify type) Type for acid mist			
VENTILATION	LOCAL EXHAUST	Yes	SPECIAL
	MECHANICAL (General)		OTHER
PROTECTIVE GLOVES		Yes, rubber	EYE PROTECTION
			Yes, face shield
OTHER PROTECTIVE EQUIPMENT			
apron, boots			

SECTION IX - SPECIAL PRECAUTIONS	
PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING	Store indoor at min. of 30° F. Keep from freezing.
OTHER PRECAUTIONS	Exothermic reaction with alkalis, reducers, organic compounds. Violent reaction with strong reducers.